SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR OREGON

AS OF

MARCH 1, 1944

* * *

Issued March 9, 1944

by

Division of Irrigation, Soil Conservation Service
United States Department of Agriculture
and

Oregon Agricultural Experiment Station, Medford Branch
cooperating

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Data included in this report were obtained by the agencies listed above, in cooperation with the Oregon State Engineer, U. S. Forest Service, National Park Service and other Federal, State and local organizations. 1/

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Vol. IX No. 2

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WATER SUPPLY OUTLOOK
as of March 1, 1944

Oregon's 1944 water supply prospect has shown modest improvement since February first. Despite localized improvements, the outlook continues poor in many places. 59 percent of irrigated lands have in sight "good" to "fair" water supplies. These are lands chiefly served from reservoirs containing substantial "hold-over" from 1943. Very few areas depending for irrigation upon unregulated stream flow have in sight at present other than "deficient" to "fair" water supplies.

Mountain snow cover continues considerably below average on nearly all snow courses. If snowfall during March is normal or less, stream flow below normal during the irrigation season seems sure for most localities.

Most watershed soils in Eastern Oregon remain hard frozen beneath the snow. This condition is likely to favor greater reservoir storage from rapid run-off, but is considered unfavorable to sustained run-off where storage facilities are lacking. Mountain snow this season is of unusually low density.

Total water stored in all reservoirs is 10 percent less than of similar date in 1943 and 1942, but is greater than of this date in 1940. The number of reservoirs half full or better is more than in 1942 or 1941, but is the same as in 1940 and 1943.

Precipitation accumulated in Oregon valleys since October 1 is considerably below normal, and is the least for this 5-months' period of any year since 1937.

Explanation of Tabulation Below and of Water Forecast Map Preceding Page 7

Tabulated below are figures indicating for what percentage of Oregon's irrigated acreage (1,046,597 acres total by 16th U. S. Census, 1940) the 1944 irrigation water supply is expected to be "good" or otherwise. Terms describing forecasted water supply are based on local definition. The descriptive words indicate whether or not the prospective water supply to the given percentages of the total is expected to be, by local standards, deficient, fair (generally adequate but somewhat short late in the season), or good (plenty) for crop production on the usual acreage. These differences are shown in color on the map preceding page 7.

Prospective 1944 Irrig. Supply:	Deficient*	Fair	Good	No Forecast	Total
Percent of Total Irrigated Area:	36	21	38	5	100

Any change in the current outlook will be fully noted in the final Snow Surveys and Water Supply Forecasts report for 1944, to be issued April 10, 1944.

* Better than 1930, 1931 or 1934.

The following preliminary run-off forecasts are based on present mountain snow cover and on the assumption that average increase of snow cover will occur during March. Greater or less than average increase in mountain snow cover during March will correspondingly modify these estimates:

Area	Stream	Apr.-Sept., incl., Stream Flow Expectancy as of Mar. 1, 1944: As % of Avg. 1929-43		As % of Last Year
Northcentral	White River below Tygh Valley at Sta. 3613	68		38
Umatilla-Walla Walla	Umatilla R. at Pendleton (223)	88	b	a
Northeastern	Grande Ronde R. nr. LaGrande (1816)	57	b	a
	East Fk. Wallowa R. (1822 + 1823)	75		56
	Hurricane Cr. near Joseph (1814)	78	b	a
	Lostine R. near Lostine (1810)	81	b	a
	Bear Creek near Wallowa (1815)	80	b	a
	Imnaha River at Imnaha (172)	58	b	a
Eastern	N. Fk. Malheur R. at Beulah (139)	43		18
	Malheur R. near Drewsey (1320)	35		14
	Strawberry Cr. nr. Prairie City (2434)	63	c	a
Harney Basin	Mountain snow cover below average			
Central	Odell Cr. near Crescent (3212)	89	d	57
	Crescent Lake Net Inflow	72		27
	Ochoco Reservoir Minimum Net Inflow	Not less than 9		Not less than 4
Southcentral	Mountain snow cover below average			
Klamath Basin	Upper Klamath Lake Net Inflow	113		52
Southern	Rogue River above Prospect (722)	74		55
	Fourmile Lake Net Inflow	76	b	a
	N. Fk. Little Butte Cr. below Fish Lake (Natural flow) (7230)	77	b	a
	Hyatt Prairie Reservoir Net Inflow	98		102
	N. Umpqua R. below Lake Cr. (7419)	86		59
	N. Umpqua R. at Toketee Falls (7414)	84		60
	Clearwater R. above Trap Cr. (7420)	88		66
Willamette Valley	Mid. Fk. Willam. R. at Eula (512)	76		58
	Clackamas R. at Big Bottom (5911)	72		51

a - 1943 Discharge record not yet available
b - 1929-42
c - 1931-42
d - 1934-43

COMPARISON OF SNOW COVER AS OF MARCH FIRST WITH THAT OF PREVIOUS YEARS

Snow-stored water now present above 5,000 feet:

As percent of that present one month ago	--	181
As percent of that present one year ago	--	47
As percent of that present two years ago	--	71
As percent of average	--	65

Snow-stored water now present from 2,000-5,000 feet:

As percent of that present one month ago	--	182
As percent of that present one year ago	--	41
As percent of that present two years ago	--	84
As percent of average	--	65

Snow water content on 93 percent of all measured courses is less than at this time in 1943, and in 82 percent of the comparisons, is less than on about March 1 of 1942. Snow water content on 94 percent of all measured courses is less than average.

Given below is a tabulation showing inches snow-stored water for the March 1 record period on thirteen scattered snow courses. The generally inferior snow pack of March 1, 1944, as compared with that of the same date in most earlier years, is clearly evident.

Water Content of Snow (Inches) as of About March 1

Stream Basin	Clack-amas	Grande Ronde	Powder	John Day-Burnt	John Day-Malheur	Crooked	Owyhee	Harney	Summer Lake	Klam.-Desch.	Klam.-Rogue	Klam.-Rogue	Rogue Umpqua
Snow Course / Year	Peavine Ridge	Moss Sprg.	Bourne	Blue Mt. Summit	Blue Mt. Sprgs.	Ochoco Mdws.	Granite Peak	Izee Sum.	Summer Rim	Chemult	Billie Creek	Annie Sprg.	Diam. Lake
1929										5.8*			12.6*
1930										1.4*	6.4	22.7	5.0*
1931										7.8*	12.8	22.1	7.8*
1932							16.5			11.9*	32.2	N.R.	15.4*
1933							7.4			12.0*	30.9	N.R.	27.0*
1934						0	7.2			0 *	N.R.	N.R.	5.4*
1935						N.R.	11.8			7.6*	N.R.	N.R.	8.6*
1936			16.0	10.5	18.6	N.R.	13.5	11.0		12.5*	36.3	52.1	17.6*
1937			10.2	9.3	15.3	13.6	7.9	8.3		11.0	27.4	37.8	21.2
1938	13.0	19.6	14.1	6.7	19.0	10.0	13.5	6.7	15.2	12.5	18.4	41.6	18.2
1939	19.2	N.R.	12.9	9.2	13.9	9.6	12.8	9.1	9.2	8.7	27.8	34.0	18.2
1940	7.6	18.0	13.0	5.4	10.3	8.0	15.0	5.2	12.6	8.0	10.8	38.0	9.6
1941	4.3	16.9	10.6	8.1	14.0	9.8	15.7	7.7	13.6	8.4	13.5	39.9	12.8
1942	8.9	13.9	12.9	9.3	12.8	11.6	13.7	8.8	13.0	10.2	18.0	30.0	14.6
1943	28.2	32.1	24.6	13.4	23.0	14.8	18.9	12.8	20.7	21.4	31.9	46.3	32.9
1944	7.3	13.5	8.7	4.6	7.4	6.1	7.4	6.1	7.7	6.1	15.5	21.7	10.6

Underscored is least March 1 water content of snow of record period for each snow course shown.

* From COPCO Water Station. N.R. No Report

STATUS OF SNOW COVER AS OF MARCH FIRST

Summary of Snow Survey Data
by Tributary Drainages as of About March First

Tributary Drainage	Number Of Snow Courses Averaged	Average Water Depth in Snow Cover (Inches) 1944	1943	1942	Avg. Past Yrs. of Record	Yrs. of Record	1944 Snow Water Depth (Inches) as Percent of that in 1943	1942	Avg.
Owyhee River	10	7.0	12.6				55		
	10	7.0		10.5				67	
	10	7.0			9.8	(12-4)			71
Malheur River	5	5.8	13.7				42		
	3	5.5		9.2				60	
	5	5.8			10.0	(5-8)			58
Burnt River	2	5.2	12.6				41		
	2	5.2		10.5				50	
	2	5.2			9.4	(5-8)			55
Powder River	5	8.2	20.3				40		
	5	8.2		11.7				70	
	5	8.2			14.1	(5-8)			58
Grande Ronde River	5	12.0	24.2				50		
	5	12.0		11.5				104	
	5	12.0			17.3	(5-7)			69
Walla Walla River	1	19.9	31.9				62		
	1	19.9		14.1				141	
	1	19.9			22.9	(5)			87
Umatilla River	4	10.1	15.4				66		
	4	10.1		9.9				102	
	4	10.1			12.7	(5-7)			80
Willow Creek	1	8.2	10.6				77		
	1	8.2		11.2				73	
	1	8.2			10.4	(3)			79
John Day River	8	6.6	13.9				47		
	8	6.6		9.8				67	
	8	6.6			10.6	(3-8)			62
Deschutes River	1	20.2	52.7				38		
	1	20.2		28.4				71	
	2	13.0			20.5	(2-3)			63
Crooked River	2	4.2	12.2				34		
	2	4.2		9.4				45	
	3	3.9			7.5	(1-8)			52

Tributary Drainage	Number Of Snow Courses Averaged	Average Water Depth in Snow Cover (Inches) 1944	1943	1942	Avg. Past Yrs. of Record	Yrs. of Record	1944 Snow Water Depth (Inches) as Percent of that in 1943	1942	Avg.
Sandy River	2	17.7	55.0				32		
	2	17.7		25.0				77	
	2	17.7			29.9	(6)			59
Clackamas River	2	5.7	26.8				21		
	1	7.3		8.9				82	
	2	5.7			12.6	(5-6)			45
Willamette River	4	11.2	34.7				32		
	4	11.2		15.6				72	
	4	11.2			20.6	(3-5)			54
Chewaucan River	1	4.2	8.6				49		
	1	4.2		6.4				66	
	1	4.2			6.9	(5)			61
Harney Basin	6	4.8	8.8				54		
	6	4.8		7.7				62	
	6	4.8			6.9	(4-8)			70
Silver Lake Basin	1	2.7	7.8				35		
	1	2.7		3.7				73	
	1	2.7			4.3	(4)			63
Guano Lake	2	3.9	7.6				51		
	2	3.9		8.6				45	
	2	3.9			6.8	(4)			58
Umpqua River	4	7.2	16.8				43		
	4	7.2		7.0				103	
	4	7.2			10.1	(5-15)			71
Upper Rogue River	10	8.8	15.2				58		
	10	8.8		9.9				89	
	10	8.8			12.4	(5-12)			71
Applegate River	2	13.2	19.2				69		
	2	13.2		17.6				75	
	2	13.2			18.2	(2-6)			72
Illinois River	2	8.3	12.4				67		
	2	8.3		11.8				70	
	2	8.3			13.8	(2-5)			60
Klamath Lake Basin	16*	7.3	14.8				49		
	16*	7.3		8.8				83	
	16*	7.3			10.2	(5-17)			72
Goose Lake Basin	2*	5.5	9.0				61		
	2*	5.5		8.0				69	
	2*	5.5			6.7	(5-13)			82

* Including Copco water measurement stations.

STATUS OF RESERVOIR STORAGE AS OF MARCH FIRST

In the following tabulation, water storage in acre feet in important Oregon reservoirs as of about March 1, 1944 is compared with storage as of approximately the same date in 1943, 1942, 1941 and 1940.

Storage Reservoir	Stream Basin	Capacity Acre Ft.	Acre Feet in Storage About 3-1-44	About 3-1-43	About 3-1-42	About 3-1-41	About 3-1-40
Agency Valley	Malheur	60,000	43,320	19,080c	49,250	50,910	50,120
Antelope	Owyhee	36,550	1,200	16,425	10,200	15,000	Empty
Clear Lake	Lost River	440,240b	294,020b	260,680b,c	281,540b	245,200b	241,480b
Cold Springs	Umatilla	50,000	39,000a	46,750	38,500	46,200	29,800
Cottage Grove	Willamette	30,000b	5,000b	8,100b	-	-	-
Cottonwood	Goose Lake	4,160	300e	0 c	No report	28	2,525
Crane Prairie	Deschutes	50,000	No report	38,780	24,014	23,530	32,120a
Crescent Lake	Deschutes	80,000	54,160	30,520	21,980	22,700a	32,020a
Drew Creek	Goose Lake	62,500	38,500e	33,000c	45,000	30,900	41,780
Emigrant Gap	Rogue	8,200	2,684	7,136	Full	7,926	Full
Fern Ridge	Willamette	95,000b	9,000b	49,100b	-	-	-
Fish Lake	Rogue	7,720	6,972	5,129	3,598	3,575	4,376
Fourmile Lake	Klamathd	14,000	11,510	4,087	3,294	2,988	7,826
Gerber	Klamath	94,000b	45,280b	21,740b,c	42,160b,c	50,880b	59,220b
Hyatt Prairie	Klamathd	16,000	7,080	9,872	7,080	3,055	4,431
McKay	Umatilla	74,000	39,130	62,050	66,550	29,100	32,840
Ochoco	Crooked	46,000	22,830	35,420c	15,970	5,780	4,060
Owyhee	Owyhee	715,000b	500,000b,e	606,780b,c	552,620b	594,570b	464,170b
Rock Creek	White	1,400	500	No previous reports			
Thief Valley	Powder	17,400	12,714	Full	14,860	Full a	11,912
Unity	Burnt	25,260	6,834	7,640c	11,680	12,610	11,980
Upper Klamath	Klamath	524,800b	302,100b	353,800b,c	422,900b	327,700b	383,500b
Wallowa Lake	Wallowa	40,920	31,140	25,320	32,770	18,070	11,710
Warmsprings	Malheur	190,000	116,140	150,600	150,600	132,900	105,500
Wickiup	Deschutes	180,000	0	5,060	-	-	-
Willow Creek	Malheur	26,000	10,818	10,780	No report	4,800	600e

a - Estimated
b - Available for use
c - Water being by-passed, or water level being lowered, to provide space for anticipated inflow.
d - By ditch to Rogue River side
e - Approximate

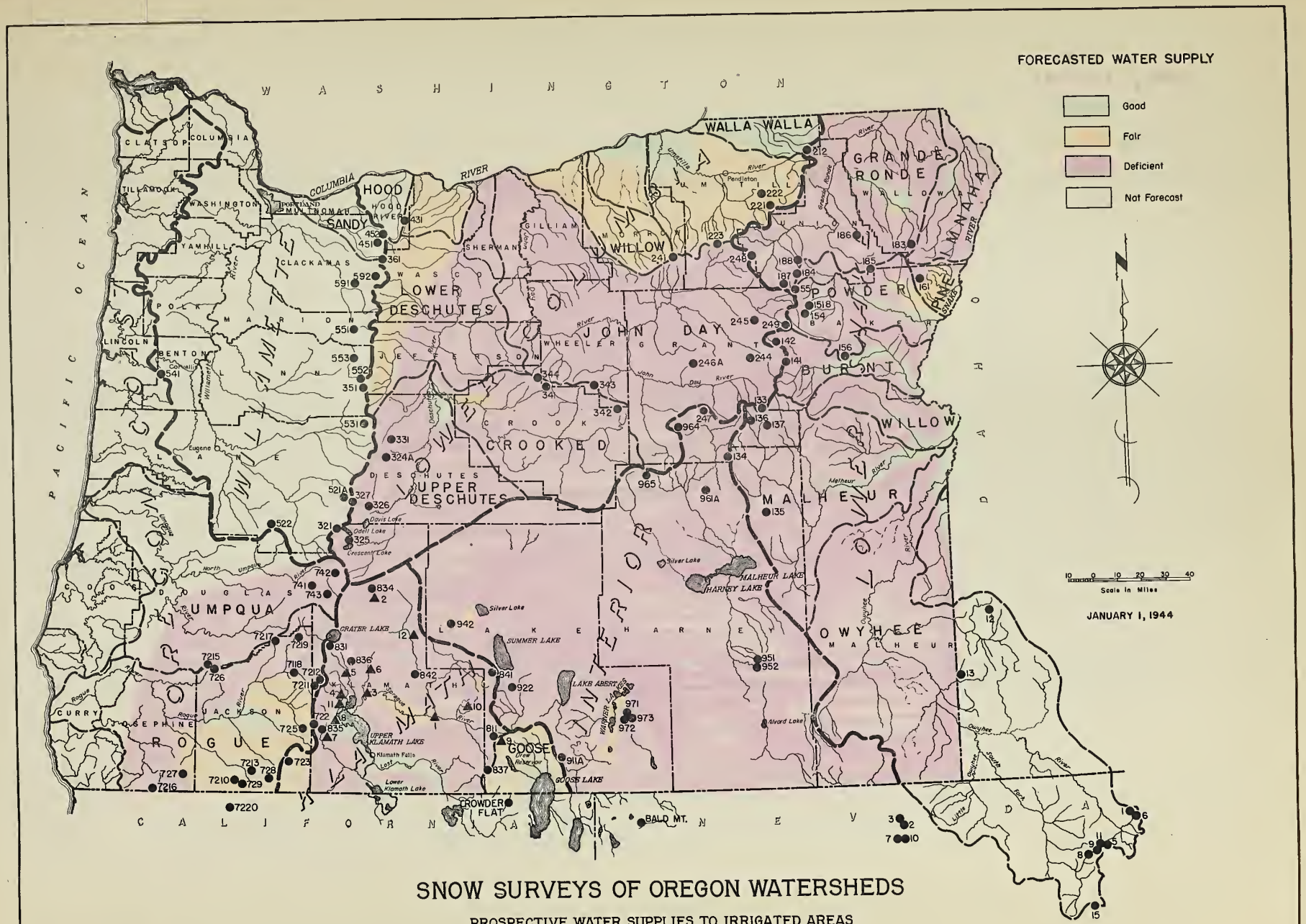
IMPORTANT OREGON RESERVOIRS

RESERVOIR NAME	NUMBER
Agency Volley	1354
Antelope	1230
Cleor Loke	823
Clear Lake	36R1
Cold Springs	22R1
Cottage Grove	5220
Cottonwood	8115
Crane Proirie	3220
Crescent Loke	322
Drew Creek	814
Emigront Gop	7267
Fern Ridge	5413
Fish Loke	7237
Four Mile Loke	8321
Gerber	8215
Hyott Proirie	8320
McKay	2231
Ochoco	3420
Owyhee	1234
Rock Creek	36R3
Thief Valley	1514
Thompson Volley	9411
Unity	1415
Upper Klamath Lake	832
Wollowo Loke	186
Warm Springs	1322
Wickiup	3137
Willow Creek No. 3	1323

25 0 25 50
SCALE IN MILES
1-27-43

U.S. DEPT. OF AGRICULTURE

SOIL CONSERVATION SERVICE
7-L-8060



SNOW SURVEYS OF OREGON WATERSHEDS

PROSPECTIVE WATER SUPPLIES TO IRRIGATED AREAS

(Dry Farm Areas or Forest and Range Lands Not Necessarily Included)

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
7-L-8563

STATUS OF VALLEY PRECIPITATION AS OF OCTOBER 1 TO DATE

Month	Oct.		Nov.		Dec.		Jan.		Feb.		Period	
Section	P	D	P	D	P	D	P	D	P	D	P	D
S. E.	1.53	+0.77	0.46	-0.54	0.46	-0.68	0.8	-0.5	1.2	+0.2	4.4	-0.8
S. C.	2.00	+0.98	0.81	-0.89	0.71	-1.16	1.3	-0.6	1.3	-0.2	6.1	-1.9
N. C.	1.93	+1.14	0.89	-0.68	0.51	-0.87	0.6	-0.9	0.8	-0.3	4.7	-1.6
Col. Riv.	2.21	+1.20	0.60	-1.26	0.84	-0.74	0.7	-1.0	1.4	0.0	5.8	-1.8
Wal. Mts.	1.43	-0.26	0.74	-0.97	0.93	-0.85	0.1	-1.3	1.1	-0.3	4.3	-3.7
Blue Mts.	1.89	+0.40	0.91	-1.31	0.97	-1.11	0.4	-1.7	2.0	+0.2	6.2	-3.5
Southern	3.70	+1.89	1.58	-2.22	1.25	-2.39	2.6	-1.1	2.7	-0.4	11.8	-4.2
Willamette	7.68	+3.79	3.85	-4.22	3.75	-4.38	5.1	-2.7	4.0	-2.2	24.4	-9.7
Area	2.80	+1.24	1.23	-1.51	1.18	-1.52	1.4	-1.2	1.8	-0.4	8.5	-3.4

P - Inches precipitation. D - Inches departure from normal.

S. E. - Southeastern Oregon range lands, Harney and Malheur Counties.
S. C. - Southcentral Oregon range lands, Lake County and Klamath County, except the Cascade Mountains.
N. C. - Northcentral Oregon wheat and range lands, Crook, Deschutes, Jefferson, Wheeler and part of Grant Counties.
Col. Riv. - Columbia River area, wheat and range lands, Gilliam, Morrow, Sherman, Wasco and part of Umatilla Counties.
Wal. Mts. - Wallowa Mountain area, forest and range lands, Wallowa and part of Baker County.
Blue Mts. - The Blue Mountain forest and range area, Union and parts of Baker, Grant and Umatilla Counties.
Southern - Southern Oregon irrigated section, Jackson and Josephine Counties.
Willamette - Parts of Polk, Benton, Yamhill, Washington, Lane and all of Linn, Marion, Clackamas and Multnomah Counties.

Note: Data for the last two months shown above are preliminary only, as they are based on a few stations only. Data for earlier months have been corrected to include all the stations in Climatological Data for the area.

TRIBUTARY BASINS (Primary & Secondary & Snow Courses)	LOCATION Oregon Number	Sec.	Twp.	Range	Elev.	About March 1, 1944 Date	Avg. Snow Depth (In.)	Avg. Water Depth (In.)	SNOW COVER MEASUREMENTS Average Water Depth (Inches) One Month Ago (2-1-44)	One Year Ago (3-1-43)	Two Years Ago (3-1-42)	Avg. for past yrs. of record	Yrs. of record
UPPER COLUMBIA DRAINAGE													
LOWER SNAKE IN OREGON													
OWYHEE RIVER													
Granite Peak	Nev.	27	44N	39E	8600	2-24	32.9	a 7.4	-	18.9	13.7	12.8	12
Mary's River	Nev.	4	44N	58E	8000	3-4	61.0	a 15.4	-	24.0	17.7	18.2	7
Martin Creek	Nev.	24	44N	59E	7000	2-23	26.8	a 4.2	-	9.9	8.5	7.4	12
Rodeo Flat	Nev.	31	43N	54E	7000	3-3	36.9	a 10.4	-	12.5	11.4	10.5	10
Big Bend	Nev.	30	45N	56E	6800	2-29	26.3	6.4	-	16.3	10.2	10.0	12
Fry Canyon	Nev.	32	43N	54E	6800	3-3	32.8	8.2	-	10.7	10.5	9.8	10
Gold Creek Ranger Sta.	Nev.	32	45N	56E	6600	2-29	17.8	4.0	-	10.9	8.1	7.0	12
South Mountain No. 2	Idaho	35	7S	5W	6340	2-29	26.2	7.1	2.2	16.0	12.1	12.2	4
Tremewan Ranch	Nev.	4	29N	55E	5600	3-1	10.9	2.9	-	2.3	4.1	3.1	12
Taylor Canyon	Nev.	32	39N	53E	5200	3-2	18.8	4.2	-	4.4	8.5	6.6	9
MALHEUR RIVER													
Blue Mountain Springs	133	21	15S	35E	5900	3-2	30.5	a 7.4	4.1	23.0	12.8	15.9	8
Crane Prairie	137	24	16S	34E	5375	3-1	28.0	a 6.3	-	14.8	-	9.9	5
Lake Creek	136	10	16S	33½E	5120	2-29	28.9	a 6.4	-	16.4	-	11.7	5
Rock Spring	134	23	18S	32E	5100	3-1	20.8	4.8	1.8	9.8	8.2	7.5	8
Stinking Water	135	33	21S	34E	4800	2-29	15.9	4.3	2.2	4.4	6.6	5.1	6
BURNT RIVER													
Dooley Mountain	156	32	11S	40E	5430	3-1	26.3	5.9	2.8	11.8	11.7	9.7	5
Blue Mountain Summit	141	6	12S	36E	5098	2-29	23.0	4.6	2.5	13.4	9.3	9.0	8

a - Telegraphic; subject to minor revision.

TRIBUTARY BASINS (Primary & Secondary & Snow Courses)	LOCATION Oregon Number	Sec.	Twp.	Range	Elev.	SNOW COVER MEASUREMENTS About March 1, 1944 Date	Avg. Snow Depth (In.)	Avg. Water Depth (In.)	Average Water Depth (Inches) One Month Ago (2-1-44)	One Year Ago (3-1-43)	Two Years Ago (3-1-42)	Avg. for past yrs. of record	Yrs. of record
POWDER RIVER													
Anthony Lake	155	18	7S	37E	7125	2-29	54.9	13.0	-	32.7	14.4	21.6	5
Bourne	154	33	8S	37E	5800	2-29	32.9	8.7	4.6	24.6	12.9	14.3	8
Dooley Mountain	156	32	11S	40E	5430	3-1	26.3	5.9	2.8	11.8	11.7	9.7	5
Eilertson Meadows	151B	18	8S	38E	5400	2-29	26.0	5.2	3.2	17.8	9.1	12.9	6
Gold Center	249	21	9S	36E	5340	3-1	29.1	8.2	4.3	14.4	10.4	11.8	5
GRANDE RONDE RIVER													
Aneroid Lake	183	16	4S	45E	7480	2-26	59.7	16.8	12.2	-	-	-	0
Anthony Lake	155	18	7S	37E	7125	2-29	54.9	13.0	-	32.7	14.4	21.6	5
Aneroid Lake No. 2	183A	16	4S	45E	7000	2-27	47.5	13.3	9.3	-	-	-	0
Moss Spring	186	27	3S	41E	5860	2-29	51.5	13.5	7.0	32.1	13.9	20.1	5
Beaver Reservoir	188	8	5S	37E	5340	Abt.3-1	30.5	a 6.8	3.4	13.6	7.6	12.4	5
Tollgate	212	32	4N	38E	5070	3-2	61.6	19.9	8.4	31.9	14.1	22.9	5
Meacham	221	24&25	1S	35E	4300	2-26	33.9	7.0	3.1	10.5	7.4	9.3	7
LOWER COLUMBIA DRAINAGE													
WALLA WALLA RIVER													
Tollgate	212	32	4N	38E	5070	3-2	61.6	19.9	8.4	31.9	14.1	22.9	5
UMATILLA RIVER													
Tollgate	212	32	4N	38E	5070	3-2	61.6	19.9	8.4	31.9	14.1	22.9	5
Lucky Strike	223	28	3S	32E	5050	2-25	37.5	8.2	4.5	13.0	11.8	11.5	5
Meacham	221	24&25	1S	35E	4300	2-26	33.9	7.0	3.1	10.5	7.4	9.3	7
Emigrant Springs	222	29	1N	35E	3925	2-26	28.1	5.2	1.7	6.3	6.4	7.1	7
WILLOW CREEK													
Arbuckle Mountain	241	33	4S	29E	5400	3-3	36.2	8.2	3.7	10.6	11.2	10.4	3

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JOHN DAY RIVER													
Snow Mountain	965	1	19S	26E	6300	2-28	31.0	5.6	-	-	-	-	0
Olive Lake	245	14	9S	33½E	6000	3-1	36.1	a 8.6	4.6	19.3	11.7	15.4	8
Blue Mountain Springs	133	21	15S	35E	5900	3-2	30.5	a 7.4	4.1	23.0	12.8	15.9	8
Arbuckle Mountain	241	33	4S	29E	5400	3-3	36.2	8.2	3.7	10.6	11.2	10.4	3
Gold Center	249	21	9S	36E	5340	3-1	29.1	8.2	4.3	14.4	10.4	11.8	5
Izee Summit	964	28	16S	29E	5293	3-1	21.7	a 6.1	2.8	12.8	8.8	8.7	8
Starr Ridge	247B	20	15S	31E	5150	3-1	17.5	a 5.0	2.3	9.5	6.2	6.1	8
Blue Mountain Summit	141	6	12S	36E	5098	2-29	23.0	4.6	2.5	13.4	9.3	9.0	8
Beech Creek Summit	246A	4	12S	30E	4800	2-29	17.2	a 4.7	3.2	8.5	7.8	7.3	7
DESCHUTES RIVER													
Snow Mountain	965	1	19S	26E	6300	2-28	31.0	5.6	-	-	-	-	0
Ochoco Meadows	341	21	13S	20E	5200	3-1	28.0	6.1	2.7	14.8	11.6	9.7	8
Cascade Summit	321	7	23S	6E	4880	2-29	47.8	14.4	7.3	-	-	-	0
Tamarack	342	8	15S	25E	4800	2-25	14.3	3.1	-	-	-	7.2	1
Hogg Pass	351	24	13S	7½E	4755	3-1	60.0	20.2	12.4	52.7	28.4	34.2	3
Marks Creek	344	25	12S	19E	4540	2-28	11.4	2.4	0.3	9.6	7.2	5.7	6
Clear Lake	361	29	4S	9E	3500	2-29	20.0	5.9	-	-	-	6.8	2
SANDY RIVER													
Phlox Point - Mt.Hood	452	6	3S	9E	5600	2-28	81.9	25.2	15.0	74.5	35.0	44.0	6
Still Creek	451	25	3S	8½E	3700	2-26	42.5	10.2	5.0	35.5	10.9	15.8	6
CLACKAMAS RIVER													
Peavine Ridge	591	14&15	6S	7E	3500	3-1	27.5	7.3	3.7	28.2	8.9	13.5	6
Clackamas Lake	592	35	5S	8½E	3400	2-27	16.0	4.1	2.0	25.3	-	11.6	5

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WILLAMETTE RIVER													
Hogg Pass	351	24	13S	7½E	4755	3-1	60.0	20.2	12.4	52.7	28.4	34.2	3
Champion	522	12	23S	1E	4500	2-29	45.8	14.3	4.4	30.2	11.7	20.4	5
Santiam Junction	552	14	13S	7E	3990	3-1	25.0	6.8	3.8	32.4	14.6	17.2	3
Marion Forks	553	28	11S	7E	2730	3-1	11.5	3.4	1.4	23.6	7.6	10.4	3
INTERIOR DRAINAGE													
SILVER LAKE													
Silver Creek	942	25&26	29S	13E	4900	2-26	8.2	2.7	1.6	7.8	3.7	4.3	4
CHEWAUCAN RIVER													
Mill Creek	922	1	34S	17E	6200	2-28	25.8	4.2	-	8.6	6.4	6.9	5
HARNEY BASIN													
Deer Creek	973	17	36S	26E	6670	3-4	31.5	5.9	-	8.2	8.7	7.9	4
Hart Mountain	971	1	36S	25E	6350	3-2	13.5	2.8	-	4.3	7.0	4.4	5
Snow Mountain	965	1	19S	26E	6300	2-28	31.0	5.6	-	-	-	-	0
Izee Summit	964	28	16S	29E	5293	3-1	21.7	a 6.1	2.8	12.8	8.8	8.7	8
Idylwild Camp	961A	33	20S	31E	5200	3-2	19.9	4.3	1.2	8.5	7.2	6.9	8
Starr Ridge	247B	20	15S	31E	5150	3-1	17.5	a 5.0	2.3	9.5	6.2	6.1	8
Rock Spring	134	23	18S	32E	5100	3-1	20.8	4.8	1.8	9.8	8.2	7.5	8
WARNER LAKE													
Camas Creek	911A	5	39S	21E	5720	2-29	34.1	7.6	3.8	-	-	-	0
GUANO LAKE													
Bald Mountain	Nev.	17	45N	21E	6720	2-29	22.7	a 3.4	-	7.5	6.2	5.6	4
Guano Creek	972	13	36S	25E	6480	3-3	27.2	4.4	-	7.7	11.1	7.9	4

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WEST COAST DRAINAGE													
UMPQUA RIVER													
Diamond Lake	743	29	27S	6E	5315	2-28	34.4	10.6	7.4	32.9	14.6	15.1	15
Champion	522	12	23S	1E	4500	2-29	45.8	14.3	4.4	30.2	11.7	20.4	5
Goolaway Mountain	7215	30	32S	3W	3730	2-27	11.6	2.7	2.3	3.8	1.1	3.6	5
Goolaway Gap	726	32	32S	3W	3000	2-27	4.9	1.0	1.3	0.2	0.5	1.2	5
ROGUE RIVER													
Wagner Butte	7213	1	40S	1W	6900	3-2	38.7	11.9	8.7	14.7	16.1	14.8	6
Scragg Mountain	7220	9	47N	10W	6200	Report Delayed			11.4	27.0	21.2	24.9	3
Annie Spring	831	19	31S	6E	6018	3-1	63.9	21.7	14.3	46.3	30.0	36.4	10
Billie Creek Divide	722	30	36S	5E	6000	2-28	49.8	15.5	8.3	31.9	18.0	22.2	12
Grayback Peak	727	9	40S	5W	6000	2-29	47.4	14.4	11.6	23.8	19.2	21.5	2
Hyatt Prairie Reservoir	723	15	39S	3E	4900	3-6	39.7	11.1	6.4	10.9	9.2	10.4	11
Fish Lake	725	3	37S	4E	4865	2-29	32.9	8.9	4.6	15.3	9.6	13.4	9
Siskiyou Summit	728	17	40S	2E	4630	2-27	15.1	5.0	3.8	8.6	6.3	6.6	8
Althouse	7216	17	41S	7W	4400	2-29	9.3	2.2	0.6	1.1	4.4	6.1	5
Goolaway Mountain	7215	30	32S	3W	3730	2-27	11.6	2.7	2.3	3.8	1.1	3.6	5
Silver Burn	7219	30	30S	4E	3720	2-29	27.9	8.7	5.3	15.6	8.4	10.6	7
South Fork Canal	7218	12	33S	3E	3500	3-1	6.2	1.7	Trace	4.2	Trace	4.5	7
Goolaway Gap	726	32	32S	3W	3000	2-27	4.9	1.0	1.3	0.2	0.5	1.2	5
KLAMATH LAKE BASIN													
Summer Rim	841	15	33S	16E	7200	3-1	37.2	7.7	-	20.7	13.0	14.0	6
Annie Spring	831	19	31S	6E	6018	3-1	63.9	21.7	14.3	46.3	30.0	36.4	10
Billie Creek Divide	722	30	36S	5E	6000	2-28	49.8	15.5	8.3	31.9	18.0	22.2	12
Quartz Mountain 2/		33	37S	16E	5504	2-29	26.0	5.5	3.3	10.0	9.0	7.1	13
Sun Mountain	836	22	32S	7½E	5350	2-29	45.0	14.6	8.2	37.9	19.9	25.4	6

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KLAMATH LAKE BASIN (Cont'd.)													
Quartz Mountain	811	2	38S	16E	5320	2-29	24.2	5.5	2.3	8.1	7.1	6.3	5
Lake of the Woods No.1	835	11	37S	5E	4960	Report Delayed			5.5	13.8	8.4	8.5	7
Hyatt Prairie Reservoir	723	15	39S	3E	4900	3-6	39.7	11.1	6.4	10.9	9.2	10.4	11
Richardson Ranch 2/		22	35S	14E	4800	2-29	2.8	0.3	1.5	3.8	0.0	2.2	17
Chemult No. 1	834	21	27S	8E	4760	2-29	22.6	6.1	4.2	21.4	10.2	11.4	7
Yamsey 2/		19	30S	11E	4600	2-28	10.1	2.7	-	7.6	0.0	2.4	15
Kirk 2/		1	33S	7E	4533	2-29	20.5	5.8	4.1	9.1	7.6	6.7	16
Beatty 2/		22	36S	12E	4300	2-29	3.5	0.5	0.0	0.2	0.0	0.2	17
Crystal 2/		26	34S	6E	4200	2-29	22.0	7.0	4.3	10.6	8.8	8.5	14
Pelican 2/		10	36S	6E	4200	2-29	20.0	6.6	3.4	9.0	3.9	4.3	17
Chiloquin 2/		34	34S	7E	4187	2-29	6.3	1.2	2.4	3.8	0.0	1.8	14
Fort Klamath 2/		22	33S	7½E	4150	2-29	15.4	5.1	3.6	6.0	4.6	4.5	17
GOOSE LAKE BASIN													
Camas Creek	911A	5	39S	21E	5720	2-29	34.1	7.6	3.8	-	-	-	0
Quartz Mountain 2/		33	37S	16E	5504	2-29	26.0	5.5	3.3	10.0	9.0	7.1	13
Quartz Mountain	811	2	38S	16E	5320	2-29	24.2	5.5	2.3	8.1	7.1	6.3	5

1/ The following organizations cooperate in the Oregon snow survey work:

STATE

- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon Agricultural Experiment Station
- Oregon State Engineer and corps of State Watermasters
- Oregon State Highway Engineers

FEDERAL

- Department of Agriculture
  - Forest Service
  - Soil Conservation Service
- Department of Commerce
  - Weather Bureau
- Department of the Interior
  - Bonneville Power Administration
  - Bureau of Reclamation
  - Fish and Wildlife Service
  - Geological Survey
  - Indian Service
  - National Park Service
- War Department
  - Army Engineer Corps

PUBLIC UTILITIES

- Eastern Oregon Light and Power Company
- Portland General Electric Company
- The California Oregon Power Company

MUNICIPALITIES

- City of Corvallis
- City of LaGrande
- City of The Dalles

IRRIGATION DISTRICTS

- Associated Ditch Companies
- Central Oregon Irrigation District
- Deschutes County Municipal Improvement District
- Grants Pass Irrigation District
- Jordan Valley Irrigation District
- Lakeview Water Users Incorporated
- Medford Irrigation District
- Ochoco Irrigation District
- Rogue River Irrigation District
- Talent Irrigation District
- Vale-Oregon Irrigation District
- Warmsprings Irrigation District

PRIVATE CORPORATIONS

- Amalgamated Sugar Company

2/ Water content determined by melting a measured sample.
(The California Oregon Power Company's stations.)